USE OF RESOURCES AND ECONOMIC COST OF THE TREATMENT OF PULMONARY ARTERIAL HYPERTENSION FOR THE SOCIAL SECURITY AND PRIVATE PERSPECTIVE OF ARGENTINA

Tassara N[1], Virgilio F[1], Ketlun MV[1], Julian G[2], Balan D[3]

[1]Janssen, Ciudad de Buenos Aires, Argentina. [2]IQVIA Brazil, San Pablo, Brazil. [3]IQVIA Argentina, Ciudad de Buenos Aires, Argentina.

OBJECTIVE

- Pulmonary arterial hypertension (PAH) is a chronic disease characterized by increased pulmonary arterial pressure that can lead to ventricular failure and death.
- The aim of this study was to estimate the annual cost per patient by functional class (FC) for the national/provincial social security and private sector perspectives and by geographic location of the healthcare providers in Argentina.

METHODS

- To estimate resource use and related unit costs, expert interviews were conducted using the modified Delphi Panel methodology. The main inclusion criteria were: physicians specializing in cardiology or pneumonology, with proven training in PAH and more than 10 years of experience in the treatment of the disease.
- Drug acquisition costs associated with each of the drug schemes, administration costs, unit costs of medical consultations and outpatient treatments, costs associated with the types of hospitalization for PAH, and costs of concomitant treatments were surveyed.
- The resource use associated with pharmacological schemes, therapeutic measures, hospital admissions and serious events was collected for FC I, II, III and IV. An exhaustive analysis of costs related with these concepts and the follow-up of PAH patients in Argentina was conducted through a micro-costing methodology considering the costs of the healthcare providers. Costs were expressed in USD (exchange rate 79,88 ARS = 1 USD)
- To analyze the variability of the results, a sensitivity analysis was performed, incorporating the minimum and maximum prices of drug acquisition costs estimated from interviews with payers to estimate changes in total costs per patient-year and for the totality of patients according to the distribution by functional class.

RESULTS

- The total annual cost for a patient with FC I ranged from USD 16,840 to USD 26,990. This cost ranged from USD 56,059 to USD 75,965 for FC II, from USD 187,186 to USD 268,162 for FC III and from USD 357,361 to USD 523,499 for FC IV.
- On average, the annual cost per patient of progressing from FC I to FC IV increased by 20,7 times. Approximately, 88.58% of the total cost per patient in FC I was associated with pharmacological treatments.
- When costs were estimated for the totality of patients in the sample, the highest cost was obtained in functional class III, due to the concentration of patients (47% of total).

CONCLUSION

- **PAH is a chronic disease with high treatment costs.**
- **Pharmacological costs were the main components of the annual expenditure of these patients, especially in functional classes III and IV.**
- **Early diagnosis of patients and their appropriate treatment could allow them to be held in functional classes I and II with lower associated costs. This could lead to a better chance of budgetary funding for patients in higher functional classes.**
- **Despite the limitations of the potential bias existence of the estimation methods, this is the first study to estimate the resource use and treatment costs of PAH in Argentina.**

ISPOR 2022. Gaylord National Resort and Convention Center. National Harbor, Washington, D.C., USA.